**Fig. S1.** CV curves of different CQDs on a platinum electrode in 0.1 M tetrabutylammonium hexafluorophosphate in acetonitrile at a scanning rate of 50 mV s\(^{-1}\).
Fig. S2. (a) UV-vis absorption spectra of $m$-TiO$_2$/N-CQDs photoanodes at immersion time range of 0-12 h. (b) Plots of absorbance at 450 nm as a function of immersion time.